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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/563,678

01/06/2006

Tadashi Nakamura

10873.1815USWO

1751

53148

7590

05/12/2008

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EXAMINER

CHU, KIM KWOK

ART UNIT

PAPER NUMBER

2627

MAIL DATE

DELIVERY MODE

05/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/563,678	Applicant(s) NAKAMURA ET AL.	
	Examiner KIM CHU	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Pre-Amendment filed on 1/6/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-15, 17-19 and 21-24 is/are rejected.
- 7) ☒ Claim(s) 8, 16 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless -
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.*

2. Claims 1-7, 9-15, 17-19 and 21-24 are rejected under 35 U.S.C. § 102(e) as being anticipated by Kobayashi (U.S. Patent 6,549,494).

3. Kobayashi teaches a recording/reproducing device having all of the elements and means as recited in claims 1-7. For example, Kobayashi teaches the following:

(a) with respect to Claim 1, the recording/reproducing device (Fig. 14) comprising: a recording/reproducing portion 53 for performing recording and reproducing of information on and from a recording medium 51 (Fig. 14); and a control portion 60 for controlling operations of the recording/reproducing portion 53, wherein the control portion 60 controls the recording/reproducing portion 53 such that medium identification information (disk information in Fig. 1) that enables the recording medium 51 to be distinguished from another recording medium is recorded repeatedly in a plurality of locations in an

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area (Fig. 1; lead-in area contains two disk information) where structural characteristic information of the recording medium is recorded within a management data area on the recording medium (Fig. 1; lead-in area is a data management area).

(b) with respect to Claim 2, the area (lead-in) where the structural characteristic information is recorded is provided in an error correction unit (buffer area) made of a plurality of sectors of the recording medium (Figs. 2A and 2C; column 4, lines 1-5).

(c) with respect to Claim 3, the error correction unit (buffer area) is an ECC block (Fig. 2B; border in is an ECC block; column 4, lines 1-5).

(d) with respect to Claim 4, when recording the medium identification information (disk information) in the area (lead-in) where the structural characteristic information is recorded, the control portion 60 determines whether medium identification information (disk information 1 and 2) already has been recorded in the area and controls the recording/reproducing portion 53 to perform recording of medium identification information (disk information 1 and 2) if the medium identification information has not been recorded (Fig. 14; write disk information to lead-in area).

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(e) with respect to Claim 5, an identification information generating portion for generating at least part of the medium identification information (Fig. 15; step E5), wherein the recording/reproducing portion 53 (Fig. 14) records the medium identification information based on the information generated by the identification information generating portion (Fig. 14; system control section 60 generates the new identification information).

(f) with respect to Claim 6, a sending/receiving portion (Fig. 14; system control section includes data links which sends/receives information) for sending and receiving information to and from a host device (such as a user) that gives an instruction for the recording and reproducing (column 4, lines 15-17), wherein the recording/reproducing portion 53 records information containing at least part of the information (disk identification) received from the host device (user) via the sending/receiving portion (in the system control section 60) on the recording medium as the medium identification information (Fig. 14).

(g) with respect to Claim 7, when recording the medium identification information (disk information) in the area (lead-in) where the structural characteristic information is recorded,

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the control portion 60 determines whether medium identification information (disk information 1 and 2) already has been recorded in the area and controls the recording/reproducing portion 53 to perform recording of medium identification information (disk information 1 and 2) if the medium identification information has been recorded, then the same medium identification information is recorded in the area. (Fig. 14; write disk information to lead-in area).

4. Method claims 9-15 are drawn to the method of using the corresponding apparatus claimed in claims 1-7. Therefore method claims 9-15 correspond to apparatus claims 1-7 and are rejected for the same reasons of anticipation as used above.

5. Kobayashi teaches a recording/reproducing method having all of the steps as recited in claims 17-19. For example, Kobayashi teaches the following:

(a) with respect to Claim 17, a step of accessing an area (disk information areas in Fig. 1) where structural characteristic information of a recording medium is recorded within a management data area (lead-in area) on the recording medium 51 (Fig. 14); and a step of reproducing medium identification information (disk information 1 and 2) that has been recorded repeatedly in a plurality of locations in the area

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(lead-in) where the structural characteristic information is recorded (Fig. 1) and that enables the recording medium 51 to be distinguished from another recording medium from at least one of the plurality of locations (Fig. 1; disk information includes disk manufacturer information).

(b) with respect to Claim 18, the step of reproducing the medium identification information (disk information) includes a step of trying reproduction (reading) of the medium identification information again by accessing another one of the plurality of locations if there is a reproduction error in one of the plurality of locations (Fig. 1; redundant disk information such as disk information 1 and 2 are recorded in the lead-in area).

(c) with respect to Claim 19, the step of reproducing the medium identification information (Fig. 1; disk information) includes a step of reproducing all of the structural characteristic information recorded in a plurality of locations of the recording medium (Fig. 1; disk information 1 and 2 are read), a step of performing an error correction operation to the reproduced structural characteristic information (Fig. 14; all data area recorded in ECC block), and a step of extracting medium identification information from structural characteristic information that has undergone the error correction operation

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and been reproduced normally (Fig. 14; data stored in a disc are recorded in ECC blocks).

6. Kobayashi teaches a recording/reproducing medium having all of the structures as recited in claims 21-23. For example, Kobayashi teaches the following:

(a) with respect to Claim 21, the recording medium 51 (Fig. 14) on which information is recorded, comprising: a user data area (Fig. 1; data area) where user data is recorded and a management data area (lead-in area) where management data is recorded (Fig. 1), wherein medium identification information (disk information) that enables the recording medium 51 to be distinguished from another recording medium is recorded repeatedly in a plurality of locations (disk information 1 and 2) in an area where structural characteristic information of the recording medium is recorded within the management data area (Fig. 1; disk manufacturer information is recorded).

(b) with respect to Claim 22, the area (lead-in) where the structural characteristic information is recorded is provided in an error correction unit made of a plurality of sectors of the recording medium (Fig. 14; disc is divided in to ECC blocks for storing information).

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(c) with respect to Claim 23, the error correction unit is an ECC block (Fig. 14; disc is divided in to ECC blocks for storing information).

7. Kobayashi teaches a host device having all of the elements and means as recited in claim 24. For example, Kobayashi teaches the following:

(a) with respect to Claim 24, the host device (Fig. 14) that instructs a recording/reproducing device to record and reproduce information using a recording medium 51, comprising: a sending/receiving portion 60 for sending and receiving information to and from the recording/reproducing device 53, and an identification information generating portion (in 60) for generating at least part of the medium identification information (disk information) that enables the recording medium 51 to be distinguished from another recording medium (Fig. 1; disk information includes manufacture information), the medium identification information being recorded repeatedly in a plurality of locations (at least two in the lead-in area) in an area where structural characteristic information of the recording medium is recorded within a management data area (lead-in area) of the recording medium (Fig. 1).

Allowable Subject Matter

8. Claims 8, 16 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

As in claim 8, the prior art of record fails to teach or fairly suggest an information recording device having following features:

(a) a memory, wherein, when formatting the recording medium, the control portion determines whether medium identification information has been recorded in the area of the recording medium where the structural characteristic information is recorded, and if the medium identification information has been recorded, then the medium identification information is stored in the memory, and after the formatting is complete, the medium identification information stored in the memory is recorded again in the area.

As in claim 16, the prior art of record fails to teach or fairly suggest an information recording device having following features:

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(a) a step of determining whether medium identification information has been recorded in the area where the structural characteristic information is recorded on the recording medium and storing the medium identification information in a memory if the medium identification information has been recorded; a step of formatting the recording medium; and a step of recording the medium identification information stored in the memory again in the area where the structural characteristic information is recorded after the formatting step is complete.

As in claim 20, the prior art of record fails to teach or fairly suggest an information recording method having following steps:

(a) a step of counting the number of pieces of structural characteristic information that have undergone the error correction operation and been reproduced normally and determining that there is an abnormality in the recording medium if the number does not satisfy a predetermined standard.

The features indicated above, in combination with the other elements of the claims, are not anticipated by, nor made obvious over, the prior art of record.

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Related Prior Art

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lee (7,102,872) is pertinent because Lee teaches that drive information is recorded twice.

Ko (6,683,835) is pertinent because Ko teaches a write protection information is recorded twice.

Takemura et al. (6,418,111) is pertinent because Takemura teaches that lead-in information are recorded in ECC blocks.

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11. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kim CHU whose telephone number is (571) 272-7585 between 9:30 am to 6:00 pm, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen, can be reached on (571) 272-7579.

The fax number for the organization where this application or proceeding is assigned is (571) 273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished application is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9191 (toll free).

/Kim-Kwok CHU/

Examiner AU2627

May 5, 2008

(571) 272-7585

/HOA T NGUYEN/

Supervisory Patent Examiner, Art Unit 2627

May 9th, 2008